

REMARKS**Summary of the Office Action**

Claims 1-4, 7, 8, 11-15, 17-19 and 21-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,445,900 to Fukao et al. (“Fukao”) in view of U.S. Patent No. 5,585,598 to Kasahara et al. (“Kasahara”).

Claims 5, 6 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukao in view of Kasahara, and further in view of U.S. Patent No. 6,072,976 to Kuriyama et al. (“Kuriyama”) and U.S. Patent No. 6,760,564 to Oohara et al. (“Oohara”).

Claims 9 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukao in view of Kasahara, and further in view of Kuriyama.

All Claims Define Allowable Subject Matter

Claims 1-4, 7, 8, 11-15, 17-19 and 21-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukao in view of Kasahara. Applicants respectfully traverse the rejection under 35 U.S.C. § 103(a).

Claim 1 recites an image forming apparatus including a first contacting unit, an image carrier, and a second contacting unit. The first contacting unit includes a positioning member which is contacted with respect to the image carrier along a predetermined weight direction. The second contacting unit is contacted with respect to the image carrier in a wrap shape. The predetermined weight direction by the first contacting unit is intersected with the wrap-shaped contact range by the second contacting unit. Thus, the invention provides for example, a

positioning member, such as a tracking roller 52, that counteracts against the force of a second contacting unit, such as an intermediate transfer belt 15, so that a photosensitive drum 11 does not have a rotational eccentricity while a plurality of developing rollers 51 transport toner to the photosensitive drum 11. Support for these features is provided at, for example, page 25, ll. 9-11; page 26, ll. 13-16; page 28, ll. 3-5 and ll. 17-24; and Figs. 2, 3A and 3B.

As shown in Fig. 2 and described at col. 3, line 58 – col. 4, line 6 of Fukao, a revolver type development unit 400 includes developing devices 401-404. Because developing devices 401-404 have curved outer surfaces, and because photosensitive drum 100 has a curved outer surface, contact between any one of the developing devices 401-404 and photosensitive drum 100 is in a direction that is normal to the surface of photosensitive drum 100. An extension of such a normal direction does not intersect the wrap-shaped contact of intermediate transfer belt 501 with the photosensitive drum 100. Accordingly, Applicants submit that Fukao does not teach or suggest a predetermined weight direction by the first contacting unit is intersected with the wrap-shaped contact range by the second contacting unit, as recited in claim 1. Applicants submit that Kasahara similarly does not teach or suggest this feature, and thus fails to overcome the above-described deficiencies of Fukao. Claims 2-4 and 7 depend from claim 1 and recite the same combination of allowable features recited in claim 1, as well as additional features that define over the prior art.

Claim 8 recites an image forming apparatus including a developing device having a positioning member which abuts against an image carrier, and a weight direction by the positioning member to the image carrier is located within an abutting range between an intermediate transfer member and the image carrier. As described above, contact between any

one of the developing devices 401-404 and photosensitive drum 100 of Fukao is in a direction that is normal to the surface of photosensitive drum 100. An extension of such a normal direction does not intersect the wrap-shaped contact of intermediate transfer belt 501 with the photosensitive drum 100. Accordingly, Applicants submit that Fukao does not teach or suggest a weight direction by a positioning member to an image carrier is located within an abutting range between an intermediate transfer member and the image carrier, as recited in claim 8. Applicants submit that Kasahara similarly fails to overcome the deficiencies of Fukao. Claims 11-13 depend from claim 8 and recite the same combination of allowable features recited in claim 8, as well as additional features that define over the prior art.

Claim 14 recites an image forming apparatus including a developing device being contacted to an image carrier by a positioning member in predetermined weight. A weight direction of the positioning member with respect to the image carrier is a substantially straight line that connects a contact point of an intermediate transfer member to the image carrier to a center of the image carrier. Applicants submit that neither Fukao nor Kasahara teach or suggest a weight direction of a positioning member with respect to an image carrier is a substantially straight line that connects a contact point of an intermediate transfer member to the image carrier to a center of the image carrier, as recited in claim 14. Claims 15 and 17-18 depend from claim 14 and recite the same combination of allowable features recited in claim 14, as well as additional features that define over the prior art.

Claim 19 recites an image forming apparatus including an image carrier, a developing unit having a plurality of developing rollers, and a transferring unit which abuts against the image carrier in a wrap shape. An extension of a line which connects a center of the image

carrier to a center of a developing roller is positioned within a range where the transferring unit abuts against the image carrier in the wrap shape. The developing unit employs a member capable of maintaining an interval between the developing roller and the image carrier in a constant value in correspondence with each of the developing rollers. Applicants submit that neither Fukao nor Kasahara teach or suggest an extension of a line which connects a center of an image carrier to a center of a developing roller is positioned within a range where a transferring unit abuts against the image carrier in a wrap shape, as recited in claim 19. Claim 21 depends from claim 19 and recites the same combination of allowable features recited in claim 19, as well as additional features that define over the prior art.

Claim 22 recites an image forming apparatus including an image carrier, a developing unit having a plurality of developing agent carriers, and a transferring unit which abuts against the image carrier in a wrap shape. When a desirable developing agent carrier is pivotally rotated to the developing position, a predetermined member abuts against the image carrier, and a direction along which the predetermined member depresses the image carrier is located within a range where the transferring unit abuts against the image carrier in the wrap shape. Applicants submit that neither Fukao nor Kasahara teach or suggest a direction along which a predetermined member depresses an image carrier is located within a range where a transferring unit abuts against the image carrier in a wrap shape, as recited in claim 22. Claims 23-24 depend from claim 22 and recite the same combination of allowable features recited in claim 22, as well as additional features that define over the prior art.

Claim 25 recites an image forming apparatus including an image carrier, a developing unit having a plurality of developing agent carriers, and a transferring unit which abuts against

the image carrier in a wrap shape. When a desirable developing agent carrier is separated from the developing position, a predetermined member is separated from the image carrier, and a direction along which the predetermined member depresses the image carrier is located within a range where the transferring unit abuts against the image carrier in the wrap shape. Applicants submit that neither Fukao nor Kasahara teach or suggest a direction along which a predetermined member depresses an image carrier is located within a range where a transferring unit abuts against the image carrier in a wrap shape, as recited in claim 25.

Claim 26 recites a method of holding an image carrier, including abutting a positioning member with respect to a pivotally rotated image carrier along a predetermined direction so as to depress the image carrier. Applicants submit that neither Fukao nor Kasahara teach or suggest abutting a positioning member with respect to a pivotally rotated image carrier along a predetermined direction so as to depress the image carrier, as recited in claim 26. Claims 27-28 depend from claim 26 and recite the same combination of allowable features recited in claim 26, as well as additional features that define over the prior art.

Accordingly, it is requested that the rejection under 35 U.S.C. § 103(a), of claims 1-4, 7, 8, 11-15, 17-19 and 21-28, be withdrawn.

Claims 5, 6 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukao in view of Kasahara, and further in view of Kuriyama and Oohara. Claims 5 and 6 depend from claim 1, and claim 10 depends from claim 8. The dependent claims recite the same combination of allowable features recited in the respective independent claims, as well as additional features that define over the prior art. Applicants submit that neither Kuriyama nor Oohara overcome the above-described deficiencies of Fukao and Kasahara. Accordingly, it is

requested that the rejection under 35 U.S.C. § 103(a), of claims 5, 6 and 10, be withdrawn.

Claims 9 and 16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukao in view of Kasahara, and further in view of Kuriyama. Claim 9 depends from claim 8, and claim 16 depends from claim 14. The dependent claims recite the same combination of allowable features recited in the respective independent claims, as well as additional features that define over the prior art. Applicants submit that Kuriyama fails to overcome the above-described deficiencies of Fukao and Kasahara. Accordingly, it is requested that the rejection under 35 U.S.C. § 103(a), of claims 9 and 16, be withdrawn.

CONCLUSION

Applicants respectfully request that this Request for Reconsideration under 37 C.F.R. § 1.116 be considered by the Examiner, placing all pending claims in condition for allowance. Applicants submit that the Request for Reconsideration does not raise new issues or necessitate additional search of the art by the Examiner.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite the prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

By: 
Peter J. Sistare
Registration No. 48,183

Dated: May 20, 2005

CUSTOMER NO. 009629
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
202.739.3000